Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently amended): A chromatic dispersion compensator, comprising:

a polarization changer;

a beam delay element; and

a beam director,

wherein the polarization changer receives an optical beam having a ~~first~~ unit of group delay induced thereon by the beam delay element and induces a change in polarization of the optical beam prior to transmitting the optical beam to the beam director, the change in polarization inducing a path change on the optical beam by the beam director whereupon the optical beam is redirected to the beam delay element whereat a ~~second~~ further unit of group delay is induced on the optical beam,

wherein the beam director is a single polarizing beam splitter that is operatively coupled with a plurality of ninety degree mirrors to facilitate inducement of at least four units of group delay on the optical beam.

Claim 2 (Previously presented): The compensator of claim 1, wherein the optical beam is a portion of an input optical beam and wherein the compensator induces multiple units of group delay on other portions of the input optical beam and re-combines the optical beam with the other portions into an output optical beam.

Claim 3 (Cancelled).

Claim 4 (Cancelled).

Claim 5 (Previously presented): The compensator of claim 1, wherein the beam delay element comprises a Gires-Tournois etalon.

Claim 6 (Previously presented): The compensator of claim 1, wherein the beam delay element comprises a plurality of Gires-Tournois etalons.

Claim 7 (Cancelled).

Claim 8 (Withdrawn). The compensator of claim 1, wherein the beam director comprises a crystal polarizer.

Claim 9 (Previously presented): The compensator of claim 1, wherein the polarization changer comprises a quarter-wave plate.

Claim 10 (Previously presented): The compensator of claim 1, wherein the incidence of the optical beam into the beam delay element is substantially normal.

Claim 11 (Currently amended): A method for chromatic dispersion compensation, comprising the steps of:

directing ~~based on a first polarization~~ an optical beam to a delay element;

inducing a ~~first~~ unit of group delay on the optical beam at the delay element;

changing the polarization of the optical beam ~~from the first polarization to a second polarization~~;

inducing a path change on the optical beam based on the ~~second~~ changed polarization;

redirecting the optical beam to the delay element; and

inducing a ~~second~~ further unit of group delay on the optical beam at the delay element.

wherein a single polarizing beam splitter is operatively coupled with a plurality of ninety degree mirrors to facilitate inducement of at least four units of group delay on the optical beam.

Claim 12 (Previously presented): The method of claim 11, further comprising the step of re-combining the optical beam with other portions of an input optical beam upon which multiple units of group delay have been induced.

Claim 13 (Cancelled).

Claim 14 (Cancelled).

Claim 15 (Previously presented): The method of claim 11, wherein the beam delay element comprises a Gires-Tournois etalon.

Claim 16 (Previously presented): The method of claim 11, wherein the beam delay element comprises a plurality of Gires-Tournois etalons.

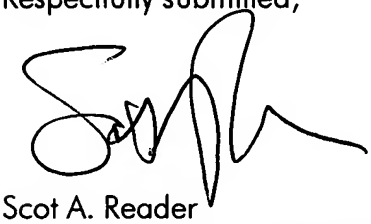
Claim 17 (Cancelled).

Claim 18 (Withdrawn). The method of claim 11, wherein the directing step is performed by a crystal polarizer.

Claim 19 (Previously presented): The method of claim 11, wherein the changing step is performed by a quarter-wave plate.

Claim 20 (Previously presented): The method of claim 11, wherein the incidence of the optical beam into the beam delay element is substantially normal.

Respectfully submitted,



Scot A. Reader
Registration Number 39,002

Telephone No. (303) 440-4050
Scot A. Reader, P.C.
1320 Pearl Street
Suite 228
Boulder, CO 80302